

CRF-840 Rock Fluid Centrifuge



Brand: OFI Testing Equipment, Inc.

Product Code: 700-570

Availability: Call for availability

Description

Introduction

A properly-equipped core centrifuge has many applications in the study of the rock-fluid properties of hydrocarbon reservoirs. Processing the centrifuge core analysis results provides relative permeability and capillary pressure data applicable to reservoir production performance calculations. Because enormous forces on the pore fluids are easily generated in the centrifuge, it is possible to perform experiments that model gravity drainage production processes. Rates and end points are key concerns that can be derived from the measured centrifuge core analysis data.

Features

- Solid construction with welded frame provides enhanced stability and safety
- Testing chamber is mounted on compressed vibration absorbers for smooth operation
- Top rotor shaft bearing enables stable and safe operation throughout the entire RPM range
- Integrated vacuum pump evacuates testing chamber so that the rotor can maintain high speeds
- Radiant heating system makes it possible to heat the core holders in a vacuum environment
- Integrated chiller for fast cool-down cycle after tests
- Hassler-type core holders apply equivalent confining pressure along the length of the cores

- Core holders are reversible for operating in either imbibition or drainage mode
- Computer with control and data acquisition software is included
- High-speed camera gives accurate measurements of the fluid interface changes
- Rigid camera mount ensures cell image alignment every time
- Auto Vacuum Switch

Specifications

Rotor

- 4.25" Rotor
- Average Radius:
 - Drainage: 6.5"
 - Imbibition: 9.5"
- Maximum Speed: 5,000 RPM
- Minimum Speed (with data acquisition simultaneously on all 4 core holders): 100 RPM

Core holders

- Sample Size: 1.0" and 1.5" diameter × 2.0" maximum length
- Maximum Confining Pressure: 3,000 PSI
- Maximum Temperature: 180°F (82.2°C)

Camera

- Resolution: 2048 linear pixels
- Data rate: 1 reading per revolution below 700 RPM, 10 readings per second above 700 RPM

Requirements

- Power: 220 Volt, 50/60 Hz, 1 Phase (20 Amp) and 3 Phase (30 Amp)

Software Features

- LabView graphical operator interface, data collection, and control
- Capillary pressure data reduction guide and programmed spreadsheet included
- Other data processing packages may be available upon request

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